BRIEFER ARTICLES

SOME HITHERTO UNDESCRIBED PLANTS FROM OREGON

Mr. William C. Cusick has submitted to the writer for determination an interesting series of castillejas and senecios, collected by him during the past few years in the Wallowa Mountains of northeastern Oregon. The material is copious and for the most part falls readily into well-known species. There are, however, a few plants which do not satisfactorily accord with any described species; these may be here characterized as follows:

Castilleja chrysantha, n. sp.—Herbacea perennis tota planta glandulosovillosa: caulibus erectis vel ascendentibus o .5–3^{dm} altis: foliis linearilanceolatis vel lanceolatis vel interdum subovatis 1–3^{cm} longis 1 .5–10^{mm} latis integris vel trifidis trinerviis crispo-hirsuto-glandulosis, laciniis linearibus acutis patentibus; inflorescentiis spicatis 1 .5 to 14^{dm} longis; bracteis anguste lanceolatis vel lanceolatis integris vel trifidis flavo-viridibus vel non rarius paululo purpurascentibus; calyce 13–18^{mm} longo antice et postice subaequaliter fisso ad circiter medio altitudinem connato, laciniis oblongis et integris ad apicem rotundatis vel bilobatis, lobis oblongis obtusis exteriore glanduloso-villosis viridibus vel aureoviridibus vel rarius paululo purpurascentibus; corolla 16–20^{mm} longa flava; galea recta 4–6^{mm} longa; labium 2 .5–3^{mm} longum, labii lobis oblongo-ovatis obtusis calycem superantibus; capsula oblongo-elliptica circiter 8^{mm} longa breviter acuminata glabra.

In wet meadows at the head of West Eagle Creek, Wallowa Mountains, Oregon, altitude 2135^m, 15 August, 1907, William C. Cusick, no. 3200^b (type hb. Field Mus. Cat. no. 225021); in moist soil near the source of the Imnaha, Wallowa Mountains, altitude 2440^m, 14 August, 1906, William C. Cusick, no. 3124 (hb. Field Mus.); on dry mountain sides, Kettle Creek, Oregon, altitude 1830^m, July, 1906, William C. Cusick, no. 3103^a (hb. Field Mus.); in wet meadows, Wallowa Mountains, Oregon, altitude 2135^m, 19 August, 1907, William C. Cusick, no. 3205^a (hb. Field Mus.); source of the Wallowa River, altitude 2440^m, 15 August, 1908, William C. Cusick, no. 3324^c (hb. Field Mus.); wet subalpine prairie of the Wallowa Mountains, 28 August, 1898, William C. Cusick, no. 2110 (hb. Field Mus.), distributed as "Castilleia oreopola Greenman, white-flowered form."

The habit and glandular pubescence of this species suggests a close relation ship to C. viscidula Gray and C. Covilleana Henderson. From the former C. chrysantha differs in having a longer calyx with oblong and rounded or obtuse

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instead of acute ultimate calyx divisions; the lip is longer in proportion to the galea, and the pubescence is more villous. From C. Covilleana it differs in the less deeply cleft bracts, in the oblong blunt divisions of the calyx, and in the longer exserted lip of the corolla.

Castilleja fraterna, n. sp.—Herbacea perennis; caulibus caespitosis numerosis ascendentibus plus minusve flexuosis o.5-1.5^{dm} altis viridibus vel purpurascentibus in partibus inferioribus glabris, superioribus villosis hinc inde glanduloso-pubescentibus; foliis linearibus vel lanceolatis 1-2.5^{cm} longis integris vel trifidis pubescentibus, laciniis linearibus acutis patentibus; spicis pauci-multifloris 5^{cm} vel minus longis; bracteis plerumque trifidis rubris; calyce circiter 2^{cm} longo exteriore pubescente antice quam postice fissiore laciniis lateralibus 2-lobatis, lobis lanceolato-oblongis obtusis rubris; corollis 2.5-3^{cm} longis exteriore plus minusve pilosis flavis et rubellis; galea erecta circiter triplo brevior quam tubus flava vel flavo-viridia, margine rubello, labio 2.5-3.5^{mm} longo basi triplicato plerumque atro-viridi, labii lobis anguste-ovatis acutis vel obtusis ad apicem rubicundis; capsula oblonga 8-10^{mm} longa brevi-acuminata acuta glabra.

In alpine regions of the Wallowa Mountains, Oregon, 14 August, 1906, William C. Cusick, no. 3125 (type, hb. Field Mus. Cat. no. 225016); and in the same locality, 27 August, 1907, William C. Cusick, no. 3222° (hb. Field Mus.).

Mr. Cusick states that the plants here cited were associated with Salix, and that they grew especially in thickets of *S. sitchensis*. The numerous subflexous stems, ascending from a common base, each terminated by a conspicuous inflorescence variegated with green, red, and yellow, render it an extremely attractive species.

Castilleja oresbia, n. sp.—Herbacea perennis basi lignosa; caulibus simplicibus erectis vel ascendentibus 1.5–2^{dm} altis crispo-hirsutis; foliis lineari-lanceolatis et integris vel trifidis 1–4^{cm} longis 2–5^{mm} latis crispo-pubescentibus, laciniis linearibus acutis patentibus; inflorescentiis terminalibus dense spicatis 1.5–4.5^{cm} longis; bracteis saepissime trifidis, lobis lateralibus linearibus obtusiusculis, lobo intermedio majore lanceolato-ovato; calyce 10–14 ^{mm} longo exteriore pubescente antice et postice aequaliter fisso, lobis oblongis bidentatis; corolla flava 14–17^{mm} longa glabra, galea recta circiter 6^{mm} longa, labii lobis lineari-elongatis 4^{mm} longis acutis; capsula oblonga acuta circiter 1^{cm} longa glabra.

On dry mountain sides, Kettle Creek, Oregon, altitude 1830m, 19 August,

1907, William C. Cusick, no. 3201a (hb. Field Mus. Cat. no. 225022).

In habit and general appearance this species resembles most closely *C. rustica* Piper, from which it differs in having shorter, more densely flowered, and less villous spikes, and in the characters of the corolla. A marked distinguishing

feature of C. oresbia is the straight corolla with the conspicuously long lobes of the lower lip.

Senecio Howellii Greene, var. lithophilus, n. var.—A forma typica recedit foliis multo amplioribus, maximis 3-15^{cm} longis 1-3.5^{cm} latis integris vel inaequaliter et alte dentatis.

In stony dry soil, Imnaha, Wallowa Mountains, Oregon, about 1830^m, 12 August, 1906, William C. Cusick, no. 3129 (hb. Field Mus.).

Mr. Cusick's specimens under the number here cited seem at first glance to be more than of varietal significance, but a comparison with the type of S. Howellii and a considerable suite of specimens from the Gray Herbarium and in the herbarium of the Field Museum show the plant in hand to be only an extreme variation with large, broad, entire or coarsely and unequally dentate leaves.—
J. M. Greenman, Field Museum of Natural History, Chicago.